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ORIGINAL DEPARTMENT.

LECTURE.

CHRONIC ULCERS AND THEIR ACCOMPANIMENTS.

A Clinical Lecture by Prof. HARRISON ALLEN, M. D., at the Philadelphia Hospital, April 8, 1876.

REPORTED BY CHARLES WINSLOW DULLES, M. D., RESIDENT.

There are in this house a number of similar cases belonging to the class which I present to you to-day. Chronic ulcers are very apt to be associated with varicose veins, such as we see in this patient. He has upon the front of his leg a superficial abrasion, which he says has been there fifteen years. It sometimes gets better, and then worse. A very slight thing will cause it to break out again. The situation here is a very common one; that is, over the lower third of the tibia, or the shin. We find the skin in an intense hyperæmia. There is no throbbing, no pain; moderate swelling, and intense redness. Upon the surface is a watery discharge. The condition is what is termed eczema chronicum, or rubrum. This redness is the most striking, but not the most significant feature. It is the ulcer which has the most importance. The leg, you see, is somewhat larger than the sound one. On the latter the skin moves freely, and can be pinched up into folds. Here neither is possible. Around the malleoli, measurement shows the circumference of the sound leg to be 9″, while this one measures 10½″; a difference of an inch and a half.

Below the ulcer, and where there is no involvement of eczema, you will find, by dissection, that there is continuity of tissue quite down to the bone; on all sides "scar," or cicatricial tissue. This constitutes a girdle, compressing the vessels going to and coming from the foot, the result of which is to strangulate all below it and keep it in a congested, unhealthy condition.

To relieve these two troubles, we shall first make soothing applications for the eczema, and at the same time enjoin rest. Then, having gone to a point where the activity of the inflammatory process has been subdued, we shall give support to the vessels below the constriction by strapping and bandaging. Such a result is attained in private practice by elastic stockings.

Case 2.—Here is another case with the same condition, but less striking in appearance. Eleven years ago, while in the army, in an attack upon a battery, his leg was broken in three places. Of this, the evidence persists in these enlargements we find on the surface of the tibia. Three years later the skin here broke, doubtless a consequence of the lowered vitality, due to the cicatricial tissue girdling the limb at this point. Measurement around the malleoli shows his sound leg to have a circumference three-quarters of an inch less than this one. The foot is cold as ice, not to his sensations, but to mine; and we note the same tendency to passive congestion as in the former case.

Cases 3 and 4 are but renewed illustrations of what I have already shown you.

Case 5.—This old man has deformity of the toes, and scarcely any movement in the ankle-joint—almost a false anchylosis. His chronic ulcer is healed, but you observe the annular constriction, and the condition of the foot. We see in another place some recent

ulcerations. They began with pustules, such as are still to be found. These have a purplish-red areola, whose color disappears upon pressure, and returns rapidly on its removal. Placing a probe in one of the openings, we find the skin about it undermined, and we can lift it up on the probe. The pustules are in some places heaped up with epithelium, and on removing the crusts I find a dark, unhealthy pus beneath them; and as the man acknowledges having contracted "the bad disorder," as many of the lower classes call syphilis, I shall designate this a "senile syphilitic exacerbation."

Here, then, are seen three distinct expressions of mal-nutrition of the foot and ankle, dependent upon a mechanical cause, viz.: a constriction of the arterial, but more especially of the return, blood from the foot. The prognosis as well as treatment of such a class of affections must be materially modified by the secondary, and in a sense remote, conditions, which are maintained by interference with the vascular supply to a part placed beyond the original seat of trouble.

COMMUNICATIONS.

CLINICAL STUDIES OF INEBRIETY.

BY T. D. CROTHERS, M. D.,

Assistant Superintendent of the New York State Inebriate Asylum, Binghamton, New York.

Inebriety is both a physical and a mental disorder, with a chain of distinct causes, exciting and predisposing, often obscure and not understood. Its connection with insanity is so intimate that it is sometimes difficult to determine which is the first cause. It frequently precedes insanity, with cerebral disease as a symptom or active cause. Degenerative processes, beginning in both physical and nervous systems, attended with perversions of the nutrient functions, break out in this way. Inherited conditions, with circumstances of climate and occupation, either acting alone or together, develop inebriety.* It often follows in cases of defective will-power, where, from want of culture and from vicious surroundings, the resisting power of the will is destroyed, and the victim is called morally diseased, because subject to every wave of passion and inclination. No case of inebriety can be called accidental, but is always the result of some special condition, circumstances or event, or alteration of structure. Its onset may be so gradual as to be unnoticed, and its progress extend over years, then, like a smouldering fire, burst out with a force and intensity uncontrollable. A large proportion of cases may be traced to definite causes, potent, and apparent to all. Others are obscure, and begin beyond the range of the pathologist, in conditions at present only faintly outlined. The social glass, taken apparently in the most accidental way, is both preceded and followed by disorders of a psychological nature, awaiting future investigation and study. The desire for stimulants, following fatigue, grief, or depression, is evidence of a perverted mental and nutrient condition. This desire may be stimulated by the most trifling circumstances, giving direction and fixing conditions of abnormal coördinating brain-power. Practically, a study of the causes indicates how far permanent curability may be effected. As in other diseases, these causes are numerous and complex, increasing or diminishing, depending upon many unknown conditions. Every case will be found to have positive indications forecasting its progress and termination.

Inebriety, as a disease, whether affecting the nutritive functions first, and after that the mind, or *vice versâ*, or more commonly both, is a new field of clinical study, giving promise of the greatest practical results. We propose to group together some cases whose origin and causes were not understood, and to deduce from them confirmation of the fact that every case has distinctive beginnings, progress, and terminations.

Case 1.—Inebriety Beginning with Sexual Excitement and Disordered Nutrition.

H. O., born of healthy, temperate parents, in a suburban town. Father doing business in the city, returning at seven in the evening, and partaking of a hearty dinner soon after. The family ate sparingly through the day, but at night indulged in a rich, elaborate meal. He attended school and college, boarding at home, eating irregularly, and without restraint of any kind. From eighteen to twenty-one years of age he remained at home, with nothing to do except to overlook the gardener, and the man-

* See author's article on "Etiology of Inebriety," in Vol. v of Transactions of American Association for the Cure of Inebriates, 1876. Copies can be had by addressing the author.

agement of a small farm. He suffered from dyspepsia during this time, for which no particular remedies were taken. At twenty the first sexual act was consummated, and was followed by impulsive cravings for stimulants, which ended in intoxication. A repetition of this act was followed by similar intoxication, of brief duration. For two years he continued in this way, drinking to excess after each sexual act, and loathing liquor at other times. Growing worse, his father placed him in a lucrative position in a large city, hoping to break up his bad associations. The cause of his drinking was not known. He would disappear over night, or for a short time, and appear again in some saloon, drinking fast and furiously. Three or four months of sobriety was broken by similar temptation and fall, ending in discharge, as unfit for business. Under the advice of physicians, he went abroad, as captain's clerk on a steam gun-ship; two years later he returned, but no better. From this time forth he traveled to all parts of the world, both with and without attendants, visited mineral springs, consulted many physicians, and sought to break up this disorder with much earnestness, but failed. If he abstained from the sexual act for two or three months, the desire for liquor came on, which, if gratified, always ended in sensuality and intoxication. He contracted gonorrhœa, followed by stricture, requiring surgical interference. The sexual power, from long abuse and heavy doses of bromide of potassium, was partially paralyzed, but the desire for liquor continued at irregular intervals. Two years ago he went to an inebriate asylum, and remained six months, returning improved in health. Three months of sobriety and active business life ending in a debauch, he returned, and remained six months longer; then an interval of nine months elapsed, and he gave way to temptation again, and was sent here. When drinking he is stupid and idiotic, loses control of his legs, and has had alcoholic convulsions.

Comments.—This case exhibits a complete chain of cause and effect, beginning in early nutrient excesses, such as irregularities of eating and sleeping, with no control or restraint, and no particular purpose or object in life; the first destroying the normal balance of nutrition, and the latter breaking down or lessening the power of the will to control the body. This prepared the way for certain disorders of both physical and mental organism. The first sexual act was the match which roused and gave direction to the uncontrolled impulses. The cerebral exhaustion which followed sought relief in irresistible cravings for liquor. The sexual function at last required the stimulus of liquor to rouse it, and then it became secondary to a disordered appetite, where it had been the first active cause before. A powerful shock had been given to the brain-cells, perverting all healthy impulses of mental and organic activity.

Case 2.—Inebriety Originating from Irregularities of Living, and Nervous Diathesis.

L., a junior partner of a large business house, temperate and healthy, nervous and impulsive, working hard as chief salesman, very methodical in all his habits, and drinking nothing but coffee and tea, from principle. His father, a Scotchman, drank wine moderately all his life; his mother, a nervous, frail woman, died from consumption when he was young. When thirty-one years of age, unmarried, he went out traveling as collector for the firm. Having large interest at stake, he worked hard, night and day, traveling by stage, steamboat and rail, regardless of exposure, eating and sleeping irregularly. Eight months of such life brought on anæmia and increased nervousness. After a long journey he was seized with a chill and fever, which was treated with hot whisky in quantities, ending in rapid recovery. From this time forth, all depression and nervousness were followed by intense cravings for liquor, which were fully gratified for a time; then, as they increased, an effort was made to break them up, without success. He avoided drinking at the bar, from pride, but could not go to bed without a bottle of liquor. This lasted for two years, during which he journeyed to Europe, and sought to lessen or change this condition. While traveling he drank every night to intoxication; when at home, the least excitement or depression brought on these cravings. On entering here he was anæmic, and filled with delusions and melancholy.

Comments.—This man inherited a nervous diathesis, with an alcoholic tendency, which might have laid dormant a lifetime. The irregularities of travel, overwork, and the consequent debility, were the active causes, and the whisky given for chills and fever acted as a torch to explode the perverted energies. Inebriety followed as a natural consequence of surroundings and mental activity.

Case 3.—Inebriety following Recovery from Paralysis, the Result of Typhoid Fever.

C. W., a farmer, with healthy parents, and strong, vigorous constitution; married at twenty, and was temperate and industrious, accumulating much property up to his thirty-first year. At this time he was seized with inflammation of the bowels, after exposure to cold; this ran into typhoid fever, which was attended with slight delirium. The fever was of moderate intensity, and was treated with nutrients, quinine, and small quantities of liquor. In three months he had so far convalesced as to be able to drive out.

While returning from a ride, he was seized with a sudden loss of consciousness, which lasted three hours, after which he was able to drive home, although suffering from general pain and trembling. Ten hours later he became paralyzed in both upper and lower extremities. The pain following was severe, with extreme sensitiveness. Opium and liquor in large quantities were given. Nine months later convalescence began, the pain subsided, and power of motion returned slowly, when he was thrown out violently from a carriage, on his side, bruising himself severely. From this time recovery from the paralysis was rapid. The shock from the injury seemed a stimulus to recovery from the brain lesion. A few months after he regained the full use of his legs and arms, and was able to go about, with no other ill feeling than that of lassitude, after long exertion. He had taken liquor daily up to this time, when he found it impossible to do without it. After abstinence for a day or more, the cravings were so intense that he drank to intoxication as the only relief. These cravings increased with every effort to break them up, until they were more like insane impulses, which seemed to have no limits, except full gratification. For five years he struggled along, alternating between excessive intoxication and short periods of sobriety; then he was sent to this asylum. Three months' residence here, and he returned restored. Six months later he began to take opium, for depression and pain, and then relapsed to drinking. A year of ineffectual effort to save himself, and he comes the second time for relief.

Comments.—Here was a healthy man, temporarily paralyzed from lesions resulting from typhoid fever, the paralysis ending in inebriety of an impulsive, spasmodic type. The brain lesion continued as a profound nutrient disorder, manifested in inebriety, from some unknown favoring causes. Possibly the treatment by liquor in large quantities determined the form of neurosal disorder; but similar cases occur daily, where other sequelæ and complications follow, making it difficult to draw any conclusions that would apply to every case.

Case 4.—Inebriety Arising from Defective Nutrition, Irregularities and Want of Early Training.

B. R., son of wealthy parents; father a man of elegant leisure, mother a woman of fashion, who died of consumption when he was eight years of age. His surroundings and living were luxurious; being the only son, all his inclinations and wishes were slavishly gratified. He grew up under no control or guidance, and all his habits were governed by circumstances; eating and sleeping at all hours. When fourteen years of age, he manifested erotic impulses, followed by wine-drinking to excess. These impulses came over him at intervals of two or more months, and were wild and uncontrollable. From this time until twenty years of age these attacks continued. The intervals were spent under a tutor, and much progress was made in general studies. At twenty he finished a course of medical lectures; and had pneumonia, from which he recovered in three months. The treatment was largely opium, in various forms, and after recovery he continued its use for all depressions and pains, alternated with wine and spirits.

During the next five years he claimed to be an invalid, and traveled, using opium and liquor, and taking medicines for various troubles. But gradually he became worse, sometimes remaining in bed a week, from prolonged debauch. He was sent to an inebriate asylum, and went away six months later, restored. For the next five years he alternated from one extreme to the other; opium-taking and wine-drinking, then a short residence in an asylum, followed by recovery, and relapse a few months later. Both opium and liquor were very pleasant to his taste, and the effects were sought for with intense anxiety and eagerness. His sexual feelings have lost their power, he has had convulsions several times, and is very nervous and irritable. He has been under treatment by several physicians of note. The cravings for opium or liquor are impulsive, and appear without warning; sometimes one,

then the other. He has been here for opium alone, and also for drinking.

Comments.—In this case a consumptive diathesis was inherited, and the want of control during early life brought on disordered nutrient functions. Eating and drinking, at all times and places, destroyed the healthy cell-growth, and prepared the way for diseased impulses. At puberty they broke out in sexual perversions; this function declining, the cravings for drink followed. After pneumonia opium-taking came on, and from this time the perversions of will-power and nutrient wants alternate between opium and liquor. The disorder began early in life, and inebriety was the natural result. He inherited a defective will and nutrient force, which were intensified by want of control and constant stimulus from surroundings.

These are but ordinary cases, received daily, brought here by physicians and friends, who expect us to break up this "habit," as they call it, failing in nearly all cases to recognize any distinct cause, or progress from stage to stage. The patients have often very imperfect conceptions of their condition, attributing it to many and unheard-of causes. One man, of fine intellect, believes his inebriety due to paralysis of the sense of smell, when in reality it originated in impaired nutrition and adversity.

The early exciting causes of these cases are overlooked, and only in chronic conditions are there any recognitions of physical lesions, and even these are assigned to the effects of alcohol.

Future studies will show that there are causes, both centric and eccentric, long before the effects of alcohol are manifest; and when inebriety is once established it follows a certain definite course. As in other mental diseases, one stage follows another, either slowly or rapidly, or marked by long halts, or pauses, concentrations and explosions, or diversions to other phases of disorder.

TENACITY OF LIFE IN CHILDHOOD.

BY JESSE WILLIAMSON, M. D.,
Of Philadelphia.

I take the liberty of publishing this case as an example of the tenacity of life in childhood.

John M., aged 15 months, was brought to my office March 28th, 1876, with a hard, dry cough, slight fever, inflammation of the pharynx, and slight enlargement of the tonsils; bowels open, secretions healthy. The mother thought he had whooping cough, but I could detect no whoop either after or during the paroxysm he had in my presence. Thinking the cough had its origin in the throat, it being inflamed, I ordered a mixture of chlorate of potassa and quiniæ, and to apply a mustard plaster to front of throat.

March 29. Called to see the child in the morning, and found him playing. Skin moist; pulse quick and full. I was unable to count the pulse, owing to the child's restlessness to return to play. I was still unable to detect any whoop. The mother said she noticed, when a paroxysm of coughing commenced, the child would catch hold of its crib, or some stationary object, to steady itself. On auscultating the chest, I found mucous râles on both sides, anterior and posterior; clear on percussion. I ordered a weak mustard plaster to anterior and posterior surfaces of the chest, stopped the chlorate of potassa and quiniæ mixture, and ordered one composed of syr. senegæ and tinct. opii camph.

March 30. Child did not seem so bright. Pulse 140, fever. Loud grating and mucous râles heard all over the chest. For the first time detected a whoop, which was very decided during and after the paroxysm of coughing. Bowels had not been open for two days, so I ordered a dose of ol. ricini; and, to ease the cough, an emetic dose of syr. of ipecac and squills.

March 31. Had a very severe attack of coughing yesterday at 10.15 A. M. Poor night after one o'clock. Called Dr. T. H. Andrews in consultation. We thought it would be better to continue the emetic dose of ipecac and squills, and in addition to give two fluid drachms of whisky during the twenty-four hours, in a tumblerful of milk.

April 1. Child better. Bronchitis gradually disappearing. Cough better; pulse good. Mustard foot bath every night. Treatment continued.

April 2. Better; lungs clearing up. Had a good night. Treatment continued.

April 3. From this date he continued to improve, until about the 8th instant, when the bronchitis again appeared. I at once commenced the senega mixture, with mustard to the chest, and in a few days the bronchitis disappeared, and with it all the violent paroxysms of coughing.

April 13. Measles appeared in one of the other members of the family, and in ten days, namely, 23d inst., my little patient had a well-marked case of it. Having a pretty high fever, I ordered a mild febrifuge.

April 24. Better, rash well out. Pulse good, slight fever, cough troubles him. Treatment continued.

April 25. On examining the lungs, I found a few râles on the right side, and I thought I detected some bronchial breathing with dullness on percussion. I ordered mustard to the chest, followed by a flaxseed poultice.

April 26. I found bronchitis on both sides, but could detect dullness nowhere. I again ordered the senega mixture, as it seemed to do so much good before. He still has a slight whoop after coughing. He improved from this date, and on the 30th inst. was well.

May 2. Went to pay my final visit, and upon examining the chest I found well-developed bronchitis on both sides. The senega mixture was again used, with mustard to the chest, followed by mush poultices, which were changed every three hours.

May 3. Found that the bronchitis had extended down into the finer tubes. Treatment continued, and in addition ol. morrhuæ one ounce, to whisky one ounce.

May 4. Dr. Andrews met me in consultation. Pulse 148, respiration 40. We decided to continue the treatment, and that the mustard should be applied every three hours. I visited him again in the afternoon, and found him about the same.

May 5. I thought I saw a slight change for the better. Pulse and respiration the same as on the 4th inst. I added to the senega mixture small doses of ammonia carb.; and instead of one ounce, I ordered thirty drops, every three hours, of whisky. P. M.—Not as well as in the morning.

May 6. Not so well. Pulse 144, weak. Respiration 60. Subcrepitant râles marked on both sides. Treatment continued. I had the mother to make some pads of lamb's wool, which were to be worn day and night on both anterior and posterior surfaces of the chest, instead of the mush poultices; they were to be well warmed before being reapplied after the mustard was taken off. The mustard still applied every three hours. P. M.—Slight improvement.

May 7. A decided improvement. Treatment continued.

May 8. Since this date there has been a steady improvement, and on the 14th of the month he was convalescent. He is now taking a tonic of iron and quiniæ.

The subject of this case was, before he was taken sick, a large, fat, and healthy child, having been so from his birth, which was, of course, greatly in his favor. One of the most important things I had to contend with was the poor hygienic condition. The family, which consisted of husband, wife, and four children, lived in two rooms, one was a bedroom, the other a living room, in which they cook and do all necessary household work. I used alum for a few days, as recommended by Meigs and Pepper, to control the paroxysms of coughing, but did not think it acted as well as the senega mixture, so I stopped it. The measles which followed was not a severe, but a well-marked case; bronchitis developing soon after the rash appeared. The duration of the rash may have been a day or two longer than usual. I attribute the cause of this, the complication of bronchitis, and the subsequent attack of capillary bronchitis, to the bad hygienic condition. The child's strength, after passing through this long siege of disease, was nearly exhausted, but now he is regaining rapidly his former health.

A REMARKABLE CASE OF GALL-STONES.

BY J. V. SHOEMAKER, A. M., M. D.,

Of Philadelphia.

The following case occurred in the practice of Dr. J. F. Bird, of this city. The doctor's attention was called to Mrs. C—— early in the spring of the present year, whom he found laboring under symptoms of gall-stone. Quite a number had already passed through the alimentary canal, and had been washed from the fæces. The characteristic pains had been experienced by the patient during the passage of these stones through the ductus communis choledochus.

Under treatment the patient became somewhat relieved, but very soon a rapid emaciation commenced, and although the appetite was good, there was no nutrition. There soon appeared a large movable tumor immediately in connection with the liver, which was considered by a consulting physician of eminence in the profession, taken in connection with the

general appearance of the patient, to indicate a cancerous condition of the liver. The patient died of extreme exhaustion on the 29th day of May, and on the following day a post-mortem examination was made by the doctor, assisted by Dr. Grissom and three other medical gentlemen. The gall-bladder was found to be perfectly impacted with gall-stones, varying in size from a small partridge-shot to a garden-pea, and numbered eighteen hundred and forty. There was not a single vestige of biliary secretion whatever. The gall-bladder itself was colorless. The duct was considerably enlarged at its hepatic extremity, in consequence of the frequent passing of gall-stones through its calibre. The liver was rather diminutive in size, but not changed materially in structure or color.

This lady had enjoyed excellent health in early life. She was the mother of four children, who survive her, and until this dreadful functional derangement took place was healthy, and gave every promise of long life. There did not appear, on the examination, to have been any other lesion than the formation of gall-stones. The bile seems to have been inspissated and immediately converted into stones, and hence emaciation, suffering and death.

Hospital Reports.

LONG ISLAND COLLEGE HOSPITAL.

SURGICAL SERVICE OF PROF. JARVIS S. WIGHT, M.D.

Reported for the MEDICAL AND SURGICAL REPORTER, by Dr. B. T. Westbrook.

Compound Fracture, Complicated by Vaccination.

GENTLEMEN:—The patient I now present to you is an Irish girl, twenty years old, who was admitted to the hospital Nov. 30th, 1875.

On that day she fell down stairs, and injured her left forearm. It was put up on a pistol splint by the physician who was called in at the time. On examination, we found that the radius was fractured two inches above its base, and that the ulna was broken off just above the styloid process, which remained in place, while the lower end of the upper fragment protruded through the skin on the dorsal aspect of the wrist. There was considerable hemorrhage from the wound. The protruding end of the upper fragment of the ulna was trimmed off with bone forceps, the bones were restored to their normal position, and the splint which I use for fractures of the forearm applied.

It consists, as you know, of a piece of board and a piece of wire cloth, joined with their longitudinal axes at right angles to each other; the horizontal portion, formed by the board, being rotated on its longitudinal axis, through an arc of about thirty-five degrees, so as to rest upon the dorsal aspect of the forearm, which is inclined to about that extent when the elbow is flexed at a right angle, and the hand is midway between pronation and supination. This was applied to the outer side of the arm and forearm, and another splint was placed on the palmar surface of the forearm.

A piece of lint, dipped in carbolized oil, was laid on the wound. Two days after admission the arm became very red, and began to swell, while numerous blebs, some containing serum, and some blood, appeared on the surface. This inflammation seemed to be different from what we would expect from ordinary causes, and I was surprised that it should present such extraordinary appearances. Upon careful examination, I found a red point over the deltoid muscle, which looked like incipient vaccination, and I expressed the opinion that it was the vaccine virus that was complicating the traumatic inflammation.

The splint was removed on the fifth day, and replaced by a trough, made of wire cloth and lined with oakum. A wash of sulphurous acid, one part each of the acid and glycerine to twelve of water, was applied, the wound still being dressed with carbolized oil.

The wash irritated the patient's throat so much, that it became necessary to discontinue it and substitute an evaporating lotion which had previously been applied.

The bursa over the olecranon became distended with serum, and was aspirated twice, in the hope of preserving the integument, which we succeeded in doing for several days.

On the seventh day a wash of lead and opium was applied, warm; and five grains of quinine sulphate were ordered night and morning. On the eighth day the arm was punctured on its dorsal surface, with a tenotome, about twenty-five times. One of the punctures opened the radial vein. This was followed by profuse venous hemorrhage, but no pus escaped. On the tenth day pus began to ooze from the openings, and the patient felt better. In the forenoon of the eleventh day symptoms of acute septic gangrene began to supervene, and it was decided at once to amputate at the shoulder; but before the consent of the friends could be obtained it was nine o'clock in the evening, and at that time the axillary portion of the arm began to be involved and to slough, and I refused to operate. The favorable moment for an operation had been lost, and the patient must take her chances for life with her arm on.

The entire hand soon became gangrenous, and large patches of gangrene appeared about the forearm, elbow, and arm. There was no appearance of sloughing at the point of vaccination, but only the ordinary course of a vaccine inoculation was observed there. These events were followed by diarrhœa, and the

patient became very much exhausted. The sloughs finally separated, and granulations appeared, so that by the seventeenth day the general appearance of the arm was much improved. But a large slough over the lower end of the radius uncovered that bone for about two inches. The bodily temperature during this time had ranged from 100° to 102° in the morning, and from 100° to 103¼° in the evening. A line of demarcation formed at the middle of the metacarpal bones, and on the 3d of January the necrosed hand was removed, *no living tissues being divided* in the operation.

The case progressed favorably after this, though the fractures did not unite, and the great loss of substance about the elbow was followed by a large cicatrix, that contracted so firmly as to entirely prevent flexion of the forearm. Amputation was again decided on toward the end of February, but on March 1st an abscess formed in the axilla, and the entire limb again took on an inflammatory appearance, almost as bad as the original trouble. Sulphurous acid was again applied, and quinine given internally. The condition soon improved again, and to-day we shall operate.

In this case the process of repair and accompanying fever, complicated by vaccination, rapidly went on to terminate in acute gangrene, marked by serous effusion into the muscular sheaths, membranes, and bursæ, with blebs of clear and bloody serum.

The peculiarity of the case is that we had a definite, known, infecting virus, complicating by its presence the inflammatory condition, which involved veins, tissues, and lymphatics, which condition is denominated, by some, traumatic erysipelas.

This opens the door to the great question of surgical infection. Many of the infecting poisons contain bacteria, micrococci, etc. These are living organic bodies, called vegetables, but breathing oxygen, and exhaling carbonic acid. They multiply in the blood, and suck oxygen from the corpuscles, asphyxiating them.

The process went on to acute, spreading traumatic gangrene; that is to say, it resembled the cases of that nature spoken of by Erichsen. As soon as this occurred, amputation was decided upon; but nine hours supervened before consent was gained, and then the axilla was so far implicated as to prevent the operation. The patient had to take the chances, and was fortunate enough to survive, with the loss of her forearm and hand.

The amputation was made at the middle third of the arm, some cicatricial tissue being included in the flaps. Iron wire was used for the deep sutures, and horse hair for the superficial.

The stump was lightly dressed with oakum. The recovery from the operation was rapid. One small abscess formed in the stump, but gave no great inconvenience.

After the amputation, the site of the vaccination became swollen, red, and tender, and a small conical swelling, one inch in diameter and half an inch high, appeared. It had not entirely subsided at the time of discharge, May 19th.

Medical Societies.

AMERICAN MEDICAL ASSOCIATION.

SECTION ON STATE MEDICINE AND PUBLIC HYGIENE.

ADDRESS OF DR. R. C. KEDZIE, OF MICHIGAN, CHAIRMAN OF SECTION.

Natural Purifiers.

The first commandment in the Sanitary decalogue is, "Be ye clean." The capital crime is filth. Hence the attention to natural purifiers. Air and water are first, but in purifying they become impure; then they become useless. Oxygen is the only purifier; it is a refiner's fire. Hence air is most active, having the most oxygen. Expired air is dead air. Hence ventilation becomes important.

Water is mainly a physical purifier; it dissolves impurities, or removes them in suspense. Air will force itself everywhere in some amount. Hence water requires more attention.

One source of danger is that water may hold a poison in solution; either a fixed poison, because incapable of self-multiplication, as arsenic, or strychnia. Dilution may diminish the danger. Or a germinal poison, capable of indefinite reproduction. Here dilution does not proportionally diminish danger.

Germinal matter is only destroyed by death. Hence the dejections of a cholera or typhoid case thrown into a reservoir would be far more dangerous. Thus, in Switzerland, the dejections of typhoid cases were cast into a running brook irrigating a meadow, filtered through a mile of porous earth, and reappeared as a spring from which the people of a town drank. This acted as a source of the disease, and struck down more than seventeen per cent. of the inhabitants.

Hence the question whether the soil is a sanitary filter and will arrest zymotic poison? Hence water must be regarded with great care.

He offered the following propositions:—

1. Uncontaminated water is the right of every one.

2. Needless pollution of water is a crime against society.

3. Evacuations of all patients with zymotic diseases must be treated with oxidants or antiseptics before entering the sewers.

4. Water in streams, lakes, etc., is common property, and no one has the right to destroy or injure its potable quality.

5. State and municipal authorities must maintain these rights.

6. They should make an early sanitary survey of such waters, in order to preserve them from contamination.

7. They should not introduce water works without at the same time a co-extensive sewerage.

These are sanitary axioms. The denizens of cities require sanitary laws. Cities are now occupying the land; villages are disappearing. The evils of condensed population are upon us, and rapidly increasing. The air may not require so much attention, but the water supply is in great danger. Trades and manufactures endanger all our streams. This may readily be prevented, but when once formed, impossible to remove.

The sanitary control of every place should begin with its early history; then may the drainage, the water supply, etc., be preserved from contamination. Otherwise, the river is dammed and the city too. Our reservoirs are placed in a position like couchant lions, to spring at a moment upon the busy villagers below, and carry destruction in their path. If mill owners, etc., were compelled to live below the dam, the effect might be good.

Slaughter houses are often so placed as to contaminate the water supply of a large population, and become slaughter houses in a different sense. These evils are easy of control at the outset. Resist the beginnings of evil. The sanitary engineer should precede the civil engineer, taking in the name of Public Health all that is necessary for the good of the coming State.

In this work the selfish interests of many will conflict; there is no task so thankless.

To quench a conflagration at its outset; to crush a pestilence in its nest; to pour life and health into the water courses of a city; these do not bring votes of thanks, and presents of plate.

There is one sanitary application men delight in, WHITEWASH.

He closed by offering the following:—

Resolved, That it is the first duty of States and municipalities; first in importance, and first in the order of time, to make a sanitary survey of the water supply, to preserve it against all unnecessary and avoidable contamination.

Resolved, That no municipality should introduce a water system without at the same time providing a corresponding and co-extensive sewer system.

These were afterwards unanimously adopted by the Association.

The Chairman called attention to the subject of "Water Supply as Related to Health," as the subject of special consideration announced in his circular, and invited the attention of members to the propriety of selecting a special subject for investigation, as he had done, following the example of his predecessors in this respect, but not limiting the work to be accomplished. "By calling attention to one field of inquiry the Chairman disclaims any intention of excluding other subjects if the members desire to introduce them."

He then presented the reports which had been received, and placed them at the disposal of the Section.

The "Potable Waters of Michigan" was the subject of a paper by Dr. R. C. Kedzie, of Michigan, and being called for, it was read. It considered the impurities of drinking water due to the source of supply, and the changes which take place consequent upon storage; the nature of the soil, comprehending soil contamination from a variety of causes, fecal contamination, grave-yard poisoning, etc., and the dangers of drainage to drinking water generally.

In answer to the question, How far is the soil a sanitary filter? he considered the question in both its chemical and mechanical aspects, and the possibility of the retention of diseased germs under the most extraordinary circumstances, the influence of some soils in this respect being very feeble. This he illustrated by citing an instance in Switzerland where typhoid fever had been communicated by means of water which had passed through soil for the distance of a mile from the source of the poison.

Impure drinking water for cattle was also dwelt upon as a not uncommon cause of unwholesome milk; and as an additional reason for more thorough sanitary supervision of water supply.

Dr. H. Hartshorne, Philadelphia, remarked on the paper read by the chairman, etc:—He was much struck with the statements as to milk. Disease may be thus produced. He could state facts to corroborate this, that a cow using foul water will not give good milk. He hardly thought disease could be carried through the soil, which acts as a filter, and would detain the disease germs.

Dr. A. N. Bell, of New York, said that while he considered such a case very extraordinary, he would receive it in default of evidence of more proximate cause, even *with* the germ theory, the tangible properties of germs being beyond any present powers of investigation. We accept the existence of disease germs from analogy only, being in smallness beyond our powers of sense. But we assume them capable of being floated in the blood current of our bodies through the interstices of living tissues. The power of soil, therefore, to deprive water of germs would, he thought, depend much more upon its composition than its quantity; and he could very well conceive conditions which in this respect would be illimitable.

In regard to the liability to disease due to impure drinking water for cattle, he believed it to be common. And he believed the mere supervision of milk in the health service to be useless, unless it also comprehended the inspection of cows—their manner of keeping, food, and drink—upon which the quality of the milk depends. The proportion of the oil globules in milk, for example, which are usually regarded as a measure of the richness of milk, is commonly greater in the milk of diseased cows than in the healthy; from cows sick with *rinderpest*, or those fed upon swill, or other unwholesome food, the milk is sometimes so loaded with oil globules as to be almost buttery. And the same condition is common to the milk of cows which have been over-

driven, or subjected to long distances on railroad cars, kept up in unventilated stables without exercise, irregular feeding, deprived of water, starved, etc. And the same conditions are well known to apply to mothers' milk and to wet-nurses. The quality of milk depends in marked degree upon the ingesta, of whatever kind—the passions and the diseases of the nurse. Infants may be purged, narcotized, salivated, or suddenly killed by nursing. And in the same way they are liable to contract scrofula, syphilis, and other constitutional vices. Hence he believed the subject of milk supply in all its bearings one of the most important subjects which could engage the attention of sanitarians.

Dr. Kedzie, of Michigan—Foreign particles will sometimes escape the filter; germs cannot be filtered out.

Dr. Jones, of Ohio, regarded the subject of milk as most important. One of his own children was fed on the milk of a particular cow, which appeared healthy, yet the child became ill. When the child appeared beyond hope the cow died, and immediately the child began to recover. No cause could be assigned for the condition of the cow, as in every way all appeared right. He believed the fearful mortality in infancy was from this diseased milk.

Papers on water supply and kindred subjects were also presented from Drs. A. B. Stuart, of Minnesota, J. L. Cabell, of Virginia, which, with Dr. Kedzie's paper, were referred to the Committee on Publication.

Joseph R. Wilson, M. D., Medical Director U. S. N., presented and read in part a paper on "Malaria," demonstrating, by numerous examples, the exclusive communicability of miasmatic poison at night, between sundown and sunrise. Discussion elicited from Dr. Wilson and Dr. Bell much information from observation in the naval service, in regard to the protection afforded by water on malarious coasts. Dr. Wilson cited the practice of laborers on the rice plantations which border the rivers in China. At nightfall the laborers hastily betake themselves to their boats and push off to mid-stream, and there remain until sunrise, protected by the intervening water, a river a mile wide affording complete protection from either shore. Hence it may be inferred that a half a mile of intervening water is sufficient for complete immunity from disease, which is sure to be contracted by dwelling on shore during the night-time. Dr. Bell cited similar observations on the Spanish Main and coast of Africa, and stated his belief in the same protective influence against yellow fever, though not, perhaps, under the same limitation as to distance. He regarded the usual custom in the Navy, when practicable, not to anchor within two miles of malarious shores, and the absolute prohibition of spending the night on such shores, as one of the best customs of the service.

"The Climatology of Minnesota" was the subject of a paper by Dr. F. Staples, setting forth its special advantages for consumption and other chronic diseases of the respiratory organs, when not too far advanced before seeking it. His conclusions are that these diseases rarely originate in Minnesota, and persons afflicted with them are benefited by a long residence there.

Dr. J. M. Toner remarked that the dust common to the high winds in Minnesota was a frequent cause of irritation to the respiratory organs, making it necessary for invalids to avoid certain situations.

Dr. Linthicum, of Arkansas, presented a report on the climatology of that State, and Dr. C. Denison one on the climatology of Colorado. The authors not being present, their papers were reported upon, and referred to the Committee of Publication.

Dr. T. J. Mays, of Upper Lehigh, Pa., read a paper on the "Social Aspects of the Alcohol Question," taking ground in favor of the food value of alcohol. Dr. E M. Hunt, of New Jersey, and others, took issue with Dr. Mays. The discussion eventuated in a wide range. It resulted in the adoption of resolutions against sending inebriates to the same asylums as the insane, and in favor of the establishment of exclusive asylums for the treatment of inebriates in every commonwealth of the Union.

Dr. J. M. Toner, of Washington, submitted a committee report in favor of action for the establishment of a National Board of Health. After considerable discussion by Drs. H. I. Bowditch, of Mass., Elisha Harris, and Bell, of New York., J. S. Billings, of U. S. Army, the report was tabled, and a resolution adopted recommending that the officers of the American Medical Association urge upon Congress the necessity of devising some plan whereby the national Government can secure such information bearing upon the health of the nation as shall be of service in its promotion.

Dr. Benjamin Lee, of Philadelphia, read a paper on the "Trials and Triumphs of a Sanitarian," which was recommended for publication in the *Sanitarian*.

A paper on "Ventilation," by Dr. A. B. Stuart, of Minnesota, was presented and reported upon by the Chairman, and according to the request of the author was referred to the *Sanitarian*.

Dr. G. Dowell, of Texas, read a paper on personal observation of two thousand cases of yellow fever in that State; and in connection therewith read from previous reports which he had made from time to time on the usual history and symptoms of that disease. His conclusions are:—yellowness of the skin occurs in about one-eighth of the cases, and rarely or never before the fifth day; black vomit, such as occurs in yellow fever, occurs in no other disease. The paper was referred to the Publication Committee.

On motion of Dr. E. Harris, of New York, the Chairman and Secretary of the Section were by resolution directed to prepare a concise statement of the particular subjects upon which action and means of the National Government

are necessary for the public health; also that they prepare a similar résumé of points and reasons which show the nature of the work which needs to be entrusted to State boards of health.

On motion the Section adjourned.

COLLEGE OF PHYSICIANS OF PHILADELPHIA, APRIL 5, 1876.

Two cases of

Excision of the Knee in Adults,

were read by H. Lennox Hodge, M. D., Demonstrator of Anatomy in the University of Pennsylvania, etc.

The first case was that of David Hunter, twenty-nine years of age, car-driver on one of the city passenger railways. The operation of excision of the knee was done in April, 1873. We have thus waited three years, and are, therefore, well able to judge of the result of the operation.

His previous history presents the following facts: His parents were healthy and are both living. He knows of no tendency to disease in his family history. A brother, however, has an abscess in his neck, and a sister has enlarged cervical glands. When he was four years old, he fell from a wheel-barrow, and a stone fell upon his left knee. This was followed by inflammation, and for a year or more he could only walk with crutches. When he was about twelve years of age, he fell and broke his left thigh. He was taken to the Pennsylvania Hospital, and there made a good recovery. When about twenty-one years old, he was accustomed to take active exercise, and one day after riding into the city from Chestnut Hill, on a horse without a saddle, his left knee became swollen and painful. An abscess formed, and after a time discharged on the leg below the knee on the inner side.

After suffering much pain for several years he was admitted to the Presbyterian Hospital, February 5, 1873. There was then extensive arthritis of the knee-joint. He was unable to walk without pain, and needed assistance from a cane to move at all. He gave his consent to the operation of excision, and it was done in April, 1873.

The joint was exposed by a straight incision. The condyles of the femur were found extensively diseased, the patella completely adherent to the femur, so that it had to be separated by a chisel, and the head of the tibia softened, and in several places penetrated by abscesses, which required the gouge. The case was, indeed, a bad one, and at the time of the operation one of my colleagues said: "If that man gets well, I believe that any man can." The wound was dressed with carbolized oil, and placed upon a bracketed splint. He did perfectly, had no bad symptoms, and was discharged from the hospital, well, on July 25th, 1873, a little more than three months after the operation.

He was then able to walk easily and well, and soon went to work driving the horses of a street car, and for pleasure, when off work, taking long walks.

The result obtained in this case most strikingly illustrates the benefits which may sometimes be obtained from excision, as a consideration of the following points will more fully show:—

The time occupied in treatment after the operation was only three months. The usual average is about eight months.

The wound was entirely closed in that time, and has never reopened.

The bones were then firmly united together, and have remained perfectly firm ever since.

The limb is straight. There is no bending or bowing in any direction.

The shortening is three and one half inches, and is compensated by a thickened sole to his shoe. Part of the shortening is, probably, due to the fracture of the thigh, which occurred when he was twelve or thirteen years old.

He walks easily, and with only a slight limp. He can walk long distances, and rapidly, and does not use crutch or cane. Time has tested the usefulness of the limb. It remains useful after three years, and enables him to support himself and family by active labor.

A report on the

Therapeutic Uses of Compressed and Rarefied Air

was presented by J. Solis Cohen, M. D., particularly with reference to Waldenburg's apparatus. Dr. Cohen said:—

The only instance in which I have as yet had a fair opportunity to test the value of the apparatus, apart from all other treatment, has been a case of emphysema, with asthma, in a young lady who has suffered from asthma from her earliest recollection, and in whom the relief to respiration has been marked after each use of the apparatus, and in whom the vital capacity has increased from 1400 cubic centimetres to more than 1600 cubic centimetres in the course of one month. The use of compressed air is also indicated in cases of deficient expansion of the air-cells.

Inspiration of compressed air increases the intra-thoracic pressure, including of course that upon the heart and vessels; and the arterial walls are thus distended, so that the pulse becomes diminished in frequency, and full and hard at the same time. The treatment is indicated in dyspnœa from inefficient inspiration, whether cardiac or pulmonic, but it must not be pushed, lest it rupture the air-vesicles in delicate subjects.

Expiration into compressed air diminishes the quantity of air leaving the lungs, impedes the interchange of gases, and, if pushed, will produce apnœa. It is indicated in deficiency of normal expiratory power, to strengthen the auxiliary muscles.

Inspiration of rarefied air diminishes the amount of air inspired, diminishes the intra-thoracic pressure, and augments the external

pressure on the chest. It enfeebles the action of the heart, and the pulse becomes soft, compressible and more frequent. Pushed to excess, inspiration becomes difficult; and apnœa may result, and even hæmoptysis.

Expiration into rarefied air increases the amount of air expelled from the lungs, and causes the chest walls to contract to a much greater degree than is possible by the most powerful voluntary expiratory effort A greater amount of carbonic acid is expelled, and the succeeding inspiration is deeper and more refreshing. It thus increases the respiratory power, augments the vital capacity, and, in patients the walls of whose chests are still to some degree movable, tends to diminish the volume of emphysematous lungs and facilitate the restoration of the elastic contractility of the over-distended air-cells. The intra-thoracic pressure being diminished, blood accumulates in the intra-thoracic organs, and is withdrawn from the periphery of the body. The treatment is indicated in chronic bronchitis and in emphysema.

Thus, from a study of the mechanical influences of augmented or diminished pressure upon the interior of the air-cells, and upon the intra-thoracic organs generally, we can judge of the propriety or impropriety of the practice in any given instance. Considerable caution is necessary in the use of such a powerful agent as compressed air, especially when inspiration is not supported by an equal amount of pressure on the exterior of the body, as is the case in the compressed air-chambers, therapeutic apartments which apparatuses like that before us are intended to supersede. Where the pressure in the arterial system is already great, where there is congestion, or a disposition to congestion in important peripheral organs, as in patients with internal hemorrhoids, menorrhagia, disposition to apoplexy, etc., the use of compressed air is strongly contra-indicated, no matter what may be the direct physical result desired in the intra-thoracic cavity. In converse manner, rarefied air, which draws the blood from the periphery to the central organs, is contra-indicated in all cases in which increased afflux of blood to the lungs is to be avoided, and in cases of insufficient pressure upon the arterial system already present, as in disposition to hæmoptysis, active congestion of portions of the lung-tissue, weak heart, and so on.

The efficient use of the apparatus, and all of the same kind, requires from fifteen minutes to half an hour each time that it is employed. It is evident, then, that it will not come into use in general practice, but is more applicable to hospital practice, provided there are attendants who can devote a proper amount of time to superintend its use. For the reasons mentioned, it is hardly a safe apparatus to place in the hands of patients, for fear of the injurious results that may arise from its over-use. In the compressed air-chambers employed on the Continent of Europe for some thirty or forty years, the entire surface of the body is exposed to the same pressure, and thus a much greater amount of compression or rarefaction can be resorted to than in the use of an apparatus which limits the action to the respiratory surfaces. In the compressed air-chambers they use from three-sevenths to two-thirds of an atmosphere compression; with this apparatus we dare use but from one-eightieth to one-thirtieth of an atmosphere; and this is to be exceeded only with great circumspection. Still the portable apparatus is to be preferred to the air-chamber, because the remedial agent can thus be brought within the reach of the patient at his own home.

I would say that there are some simple methods of increasing or diminishing the intra-thoracic pressure at will, without the aid of any apparatus at all, and which may be resorted to with advantage under appropriate circumstances. These are: (1) Valsalva's method. A forcible movement of expiration, with mouth and nostrils closed, increases the intra-thoracic pressure, and has the same physical effect as the inspiration of compressed air; and the effect can be increased by external compression of the chest and abdomen; (2) deep and prolonged inspirations, with mouth and nose closed, will expand the chest and rarefy the air in the lungs, and the effect is the same as that of the inspiration of rarefied air; (3) expiration aided by external compression of the chest and abdomen has an effect similar to that of expiration into rarefied air.

A note on the

Anatomy of the Perineum.

was presented by Harrison Allen, M. D.

The perineum, used in the sense of that region which occupies the inferior outlet of the pelvis, is composed of two distinct elements, the splanchnic and integumental.

The splanchnic is represented in the pelvic fascia; the integumental in the external sphincter and transverse perineal muscles, superficial fascia, fat, and skin. It will be seen that the pelvic fascia is modified subperitoneal connective tissue. It should be described as distinct from the obturator fascia, which extends the entire length of the pelvic portion of the internal obturator muscle, terminating at the tuberosity of the ischium, where it is continuous through the falciform process with the great sacro-sciatic ligament. The continuity of these structures is of some significance when we learn that this ligament, as it is called, is in fact but little else than a fascial extension upward of the biceps flexor muscle, and is made tense when the thigh is flexed on the trunk, and relaxed when both the femur and the innominate bone are in the same line.

Two conclusions can be drawn from these premises: (1) that the biceps flexor, while aiding the semi-membranosus and semi-tendinosus muscles in maintaining the erect position, has also an important function not enjoyed by them, of making tense the sacro-sciatic ligament

in flexion of the hip-joint; and (2) that the tension of the ligament secures tension of the obturator fascia. Now the fascia in this way made tense yields an effective fixed point to the levator ani muscle. When the use of this muscle in the act of defecation is considered, viz., to support the rectum and to guide the direction of the pressure from above, it will be seen that the squatting position is the most natural one to assume in defecating, and that any interference with the play of the biceps over the tuberosity of the ischium impairs the efficiency of this act. The privy seat, which fixes the tuberosity in defecation, and the habit of relaxation of the parts above described, acquired by resorting to this questionable accessory of the modern dwelling, may be looked upon as related causes of many phases of passive congestions of the pelvic organs, and particularly of those leading to internal hemorrhoids.

THE MISSISSIPPI STATE MEDICAL ASSOCIATION

Held its ninth annual session in the capitol at Jackson, on the 31st of May and the 1st and 2d of June, the time of meeting having been postponed from the 1st of April to that time. The attendance, though not large, was sufficient for most efficient work, and no session of the Association has been more satisfactory and harmonious. The Association has the character of being the most orderly and working body of men in the State. At the late meeting it took an advanced position on several very important subjects, the most important being the creation of a permanent committee, composed of thirteen members, styled the Executive Committee, to have charge of the whole subject of medical legislation in the State. This committee will be expected to propose a system of registration laws, a plan for health boards, and propose such legislation as may be needed and practicable for the protection of the profession and the people against the dangers and damages of incompetent practitioners.

The papers read and the discussions were equal, if not superior to any heretofore presented, and doubtless the volume of Transactions will be one of unusual interest. The next meeting will be held at Grenada, in the first week in April, 1877.

Officers elected for the ensuing year:—

President—Dr. P. J. McCormick, of Yazoo City.

Vice-Presidents—Dr. R. G. Wharton, Port Gibson; Dr. A. G. Smythe, Baldwyn; Dr. —— Hall, Grenada; and Dr. D. C. McCallum, Westville.

Recording Secretary—Dr. Wirt Johnston, Jackson.

Corresponding Secretary—Dr. —— Rice, Brandon.

Treasurer—Dr. Robert Kells, Jackson.

Executive Committee—Dr. J. M. Taylor, Chairman, Corinth; Drs. W. M. Compton, Jackson; Robert Kells, Jackson; E. G. Banks, Clinton; P. F. Whitehead, Vicksburg; R. G. Wharton, Port Gibson; B. A. Vaughan, Columbus; A. G. Smythe, Baldwin; D. C, McCallum, Westville; E. W. Hughes, Grenada; B. F. Kittrell, Black Hawk; S. V. D. Hill, Macon; H. C. McLauran, Brandon.

Delegates were appointed to the American Medical Association, and to the International Medical Congress.

EDITORIAL DEPARTMENT.

PERISCOPE.

Carbolic Acid Poisoning.

Dr. W. H. Griffith says on this subject, in the *Medical Press and Circular*:—

"Many cases have been recorded of poisoning by carbolic acid, arising both from its internal use and from the external application of it to a raw surface. It gives rise to giddiness, nausea, a feeble pulse, delirium, coma, or collapse, and sometimes to severe spasms, ending in paralysis and death. The post-mortem examination reveals a liquid state of the blood, and a pale and shrunken condition of the lungs. There is intense venous congestion of the brain and its membranes; and in Neumann's experiments on the lower animals he found that carbolic acid caused congestion of the brain substance, and fatty or granular degeneration of the liver in the lower animals.

"Olive oil is stated to be the best antidote, but the combination formed by oils with carbolic acid tends rather to facilitate the absorption of the latter. The administration of albumen, which forms with the acid an inert coagulum, is unquestionably a better measure. Husemann considers that saccharate of lime acts more efficaciously, an opinion with which I am inclined to coincide.

"Most authorities state that the treatment of a case of poisoning by carbolic acid should consist, first, of the immediate administration of emetics; but as the alimentary tract is rendered insensible by the local action of the poison, emetics are entirely inoperative and utterly useless. Without doubt, however, the

stomach-pump should be used without delay, and plenty of milk and the reputed antidotes should be administered.

"Carbolic acid is largely used to prevent stenches. When offensive gases are once formed they are not destroyed by carbolic acid, as they are by chlorine or by permanganate of potash; carbolic acid can only prevent their generation.

"The fact of venous congestion of the brain having been observed as a consequence of carbolic acid poisoning has led to the adoption, by Dr. Moslen, of Griefswald, of venesection of the external jugular, with a successful result."

Linhart's Chisel for Excision of Bone.

The well-known surgeon, Mr. T. Holmes, related before the Clinical Society of London, lately, the particulars of a case, for the purpose of introducing Linhart's chisel to the notice of the meeting. The patient, a married woman, aged forty-five, had had swelling and pain of the left ankle for three years, these symptoms having gradually increased. An incision being made over the front of the joint, the astragalus was found to be diseased, and the end of the tibia eroded. Subsequently, an operation was performed, upon Esmarch's bloodless principle, and with the minutest details of the antiseptic plan. The astragalus was removed with the lion forceps, and the lower ends of the tibia and fibula were excised with Linhart's chisel. The wound was then thoroughly dressed antiseptically. Pus, however, formed within it, and had to be evacuated. At the date of Holmes' communication (two months after the operation), the wound was almost cicatrized. This chisel, invented by Herr Linhart, of Würzburg, was a stout instrument with an oblique edge, having a thick back, on which was a projecting ridge to catch the hammer, by which the weapon was driven through the bone. It could be driven with an equable motion through the bone in the same straight line as that originally formed by its edge, and could be stopped at the proper place. It never splintered the bone, and required no dissection around the bone to be removed. It would prove a valuable acquisition to the surgeon's stock of instruments, but required a moderately firm basis for the bone to be divided, and might possibly not always prove sufficiently powerful to deal with very much solidified bone.

Obliterative Arteritis.

Under the above title, Dr. Carl Friedländer, Assistant in the Pathological Institute at Strasburg, has described, in the *Centralblatt Med. Wiss.* (No. 4, 1876), what he states to be "an extremely common affection of the arterial system, which has, up to the present time, almost entirely escaped notice." It consists in the development of a connective tissue, very rich in cells, inside the innermost coat of the small and middle-sized arteries, which leads to contraction of the lumen of these vessels, and finally to its complete obliteration. The earliest stage of this affection consists in a growth of small, closely agglomerated cells between the innermost elastic lamellæ and the endothelium; later on, these cells increase in size, and a greater or less quantity of intercellular substance is formed, so that the tissue assumes the character of granulation tissue, and there may be, in addition, a development in it of new vessels. The new growth may either invade the whole periphery of the lumen or may project into the latter only from one side. It may preserve the character of granulation tissue for a long time, or else may develop into a tough and sometimes completely sclerotic connective tissue. The muscular coats may become completely replaced by connective tissue in some cases in which the vessels are involved, in such chronic inflammatory processes as are attended by much induration; for example, in the callous edges of ulcers and in chronic metritis. This "arteritis obliterans" is rarely *primary* in its origin; it is found wherever there is acute inflammation in the tissues which the vessels supply, or else where granulation tissue is the result of chronic inflammation, or where this has passed on into induration, or finally into caseation. As a "physiological type" of this affection, Dr. Friedländer mentions the process by which the ductus arteriosus and the umbilical arteries become closed in the fœtus after birth, for this chiefly depends on a similar cell-growth in the intima.

Reviews and Book Notices.

BOOK NOTICES.

Lectures on Fever; delivered in the Theatre of the Meath Hospital and County of Dublin Infirmary. By William Stokes, M. D., D. C. L. Oxon., F. R. S., etc. Edited by John William Moore, M. D, F. K. Q. C. P., etc. Philadelphia, H. C. Lea, 1876, pp. 264.

The eminent author of this work gives, in a series of hospital lectures, an abstract of his long studies of the febrile state. It forms one of the most instructive works which has appeared from the medical press for years. It is no rehash of other's views, but the condensed results of nigh half a century of observation. As such it merits the most attentive study of practitioners.

The writer divides his lectures into two groups, one upon essential fever and its secondary affections, the other on the treatment of fever. He is a firm believer in the theory of "change of type," but advances the opinion that there are now signs of a return to the former sthenic forms of disease, especially in pneu-

monic attacks. He doubts, therefore, whether we ought to appeal to the disuse of venesection as a proof of advance in the healing art.

Fever itself, he declines to define, but describes it in the following general expression. "Fever is a condition of existence, without any known or necessary local anatomical change, and subject to new laws, different from those of health." These words appear to us to convey a serious error, inasmuch as they intimate that health and disease are each forms or phases of life, only obeying different laws. This is a mischievous biological fallacy, which would lead to utter confusion in medical thought, if generally applied.

Fevers in general he divides into essential and symptomatic. Local changes are symptomatic, such as bronchial affections, pneumonic complications, etc. The condition of the heart in fever, including the general questions of the pulse and impulse, sounds and murmurs, occupy four lectures. There is little said of the very prominent feature of *heat*, and medical thermometry is omitted altogether in the body of the book, and only mentioned in an appendix of two pages written by Dr. Stokes' assistant, Dr. Foot! These omissions are extraordinary and hardly explicable.

The last dozen lectures are devoted to treatment. No specific line is recommended. He recommends strongly the use of stimulants in the early stages of fever, believing that often patients are lost by deferring their exhibition until signs of exhaustion are seen. At the same time he is careful to avoid routinism, and urges the sound doctrine that each case must be treated on its own merits. The numerical system, he thinks, has given rise to numerous fallacies. So it has, but the fault lay not in the system, but in the ignorance of its laws and uses. In a modified form it is that alone which should guide the principles of therapeutics. But we must leave the reader to study the book for himself.

Atlas of Skin Diseases. By Louis A. Duhring, M. D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, etc. Philadelphia, J. B. Lippincott & Co. Part I. Price $2.50.

The first part of this Atlas contains plates, illustrating erythematous eczema, psoriasis on the forearm, erythematous lupus, and a pustular syphiloderm. These cases are all drawn and painted from nature, and chromo-lithographed with the utmost fidelity. The scale is about three-fourths natural size. Two pages of descriptive text, giving the clinical history of the case, is added to each plate, by the author. A close inspection of the coloring convinces the observer that truthfulness to nature has rarely been sacrificed to the technicalities of art. There is but one general criticism on this point which we have to make—the hue of the healthy skin, where shown, is too pink. This common error will become particularly apparent if the reader will place, say the plate of psoriasis of the arm, side by side with his own forearm. By this over-coloring, the contrast of healthy and diseased tissues is, to some extent, impaired.

The representations of impaired structure are exceedingly characteristic, and as they are not copies from other atlases, but from actual cases under treatment in this city, they have a value which no foreign lithographs possess. For there can be no doubt but that the peculiar conditions of heat, moisture, and other atmospheric surroundings to which the surface of the body is exposed in our climate, lead to quite different aspects in skin diseases from those presented by nominally the same ones in London or Vienna.

This important consideration sets forth the necessity, or at least the manifest advantage, of the practitioner making use of an American atlas rather than one published abroad. And as this one of Dr. Duhring is the first one drawn from local sources, it is an additional and a strong claim in its favor.

The price, too, is very moderate; twenty or twenty-five dollars will purchase the whole series of thirty-two or forty plates (as the work runs either to eight or ten parts) being little over fifty cents a plate for chromo work, done in the most perfect manner. Certainly no one can ask work of this character at a less price.

One possible misapprehension we wish to remove. Dr. Duhring has chosen his cases, not to show dermatological curiosities for the satisfaction of specialists, but to place before the general practitioner typical examples of common skin diseases. His atlas is aimed to instruct the practicing physician on a group of usual but troublesome complaints, troublesome to diagnose, and often more so to cure. This class should become purchasers of the work, and we trust they will do so to a large extent.

THE

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D. G. BRINTON, M. D., EDITOR.

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THE RELATIONS OF SEX AND SPECIES.

Few subjects with which the mind can be occupied, perhaps not one, have weightier bearings than the sex difference in organisms. The problems of social life, of individual, family and national destiny, find in it their solution. The history of species and their evolution and retrogression must be read by its light. And outside the pale of organism, the laws of polarity, of physical attraction and repulsion, of chemical affinity, and of the dichotomic process of thought, indicate beyond a question that the sexual difference is but one expression of a fundamental law of things, co-equal with existence, as all-embracing as phenomena.

More than three-quarters of a century ago, WILLIAM VON HUMBOLDT, in an essay replete with the intuitions of genius, sketched, in terse and masterly words, the outlines of a comprehensive study of the subject. Half a century subsequent, Professor BOOLE developed, by processes of startling originality, its mathematical aspects and applications. And since his untimely loss to science, the researches of LAYCOCK and DARWIN have illuminated it from the side of organic reproduction.

As physicians, it is the last-mentioned studies which interest us most nearly, especially as they refer to the human race. Very little has been positively ascertained in this field. Whether the sex is determined by the male or female parent, whether by the amount of nutrition or by mental impression, are unanswered queries. The laws of heredity are not yet established, and those of propagation and population continue to be actively debated.

A late contribution to the literature of the latter topics is an essay by Dr. NATHAN ALLEN, of Lowell, Massachusetts.* On previous occasions we have spoken of this author's opinions, and have not been able to do so in terms of approval. He is a believer in the progressive dying out of the native American population, and in the pamphlet before us (p. 38) repeats this view, though through the researches of Dr. BAKER and others it may be considered exploded.

This fallacious premise led, he tells us, to a study of the "normal standard of woman for propagation." And where, the reader naturally inquires, does he go to seek the ideal woman, most fit to become the mother of heroes? The answer is curious. Misled by the stories of easy parturition told of savage women by travelers (*qui vient de loin peut bien mentir*), and with a belief in the happy "state of nature" worthy of ROUSSEAU, he looks for her in semi-barbarous conditions, such, we suppose, as that of the Aztecs or Abyssinians.

Any careful study of the condition of women in those nations will refute this view; but instead of going in that direction, Dr. ALLEN prefers to inquire "What was the organization of man at his creation"? This he investigates from the Mosaic record, and then in the light of

* *The Normal Standard of Woman for Propagation.* pp. 39. William Wood & Co., New York.

what he says is the Darwinian theory. His appreciation of the latter may be judged from his statement that it is impossible to understand the changes of organisms unless we set up a normal standard, a perfect type, to act as a general measure for them. Now, this is precisely what the evolutionists refuse to do under any persuasion. They insist that all such standards and norms are nonsensical figments. The conditions of life are constantly fluctuating; functions and organs are constantly varying, not merely with reference to these conditions, but as effected by parentage and atavism; and there is and can be no fixed general law of propagation.

If we assume that the perpetuation of a species (man or any other) is "the design of nature"—a most unwarranted supposition, and faulty expression, by the by—this object will, under some circumstances, be most surely accomplished by few births, toward which end painful and perilous parturitions will sometimes be useful as deterrents, and under other circumstances by many births. The law, therefore, if it could be given mathematical expression, would be represented by a variant, not by a surd. In man the conditions are most complicated, and Dr. ALLEN'S conclusion, that the perfect type of woman for propagation is that of a good wet-nurse, indicates that his horizon is a very narrow one to survey so extensive a field.

NOTES AND COMMENTS.

Cysticerci in the Eye.

The *Lancet* states that at a recent meeting of the Berlin Medical Society the question of cysticerci in the eye was discussed. Whilst it was contended that the duration of life of the entozoon in the human eye was not extended over more than one year or a year and a half, when it became encysted in the vitreous body, observations of the late Professor von Graefe and others were cited, according to which the cysticercus may remain active for a period of six or seven years. Professor Lewin, in a lecture on Cysticerci of the Skin, declared in favor of spontaneous migration of the hydatid worm, in opposition to the opinion of another member, who assumed the theory of passive locomotion by the blood-current. Von Graefe observed in two patients cerebral symptoms, which disappeared when the cysticercus made its appearance in the eye, and in one case he saw cerebral disorder a year after the entozoon had entered the eye. Unstriped muscular fibres in the neck and in the membrane of the caudal vesicle enable the worm to move like the trichina. Von Graefe's description of the mode in which the cysticercus "broke into the vitreous body" also supports the theory of spontaneous motion. He states "that the spot of irruption into the interior of the eye may be anywhere, and is pretty often in the upper half of the visible background." The subsequent lowering in the corpus vitreum takes place in a diagonal direction, not simply by the law of gravitation. The case of a woman was cited in whom the entozoon had been found twenty years ago, and who had since served as a subject for ophthalmoscopic demonstrations in the Breslau Medical School.

A Secret Remedy for Asthma.

A writer in the *Peninsular Journal of Medicine* says:—

Some time ago we had occasion to analyze "Langell's Asthma Remedy." It was a mixture of ten or twelve parts of coarsely-powdered belladonna leaves with one part of powdered nitrate of potassium, dried together. The packages were about two ounces (judging from memory), and were priced $1.25 each. Pharmacists would put it up to order at fifty or sixty cents a pound. On igniting a portion, on a plate, combustion slowly extends through the mass and the patient inhales the smoke. It is said to give prompt relief, and to be asked for.

Effects of Arsenic-eating.

A late observer in Styria, Dr. Knappe, says:—

Arsenic-eaters are, in all cases with which I am acquainted, of healthy appearance, and with sexual desires strongly developed. I am of opinion that only strong persons can accustom themselves to it. They attain sometimes great age. I saw in Zeiring a still very strong charcoal-burner at the age of 70, who had taken arsenic, it was believed, for forty years. I have never noticed in habitual arsenic-eaters any

arsenical cachexia. It happened, however, that an arsenic-eater, a currier's apprentice in Liegist, 1865, took while intoxicated an overdose, and brought upon himself an acute attack of poisoning. According to his statement, he had taken a piece the size of a bean. He recovered, however, and again took to arsenic-eating, but with more circumspection.

The Management of Piles.

In some remarks on this subject before the Harveian Society, of London, Mr. A. Cooper advised that in all cases of piles the general health, the diet, and the digestive organs must be attended to. When the piles were external, astringent lotions were to be preferred to ointments; if necessary, the pile might be incised, and the blood-clot turned out. In internal piles, in addition to the general management, it was desirable to adopt as local treatment the application of iced water to the mass when down, and to return it with a little simple ointment. In florid people, piles often gave relief, and it was undesirable to remove them; but when the patients were exhausted by loss of blood, by the irritating discharge often present, or when the protruded mass caused much inconvenience, then removal by the clamp and actual cautery, or by ligature, was indicated.

System of Night Practice in Paris.

The plan on which night practice is arranged in Paris seems equally convenient for the patient and practitioner. The Municipal Council have caused lists of medical men willing to be called to patients in the night to be suspended in all the police stations. When assistance is required, the friends repair to the office, choose a medical man from the list, and are taken to his residence by a police officer, who also accompanies the doctor to the patient's house. For this visit ten francs are to be paid either by the sick person or the authorities, according to the patient's circumstances.

Arsenic from Curtains.

An English physician discovered in a lady symptoms of arsenicism. His attention was drawn to the calico lining of the chintz bed-curtains. This material was of a delicate green color, and, on examination, proved to contain a very large quantity of arsenic. This lady's husband used frequently to wake in the morning suffering from nausea, with a feeling of weight and oppression about the chest; and his eyes became inflamed. These symptoms all subsided on removing the curtains.

Correspondence.

THE CENTENNIAL INTERNATIONAL EXHIBITION.

Letter VII.

THE MEDICAL CHEMISTRY OF GERMANY, GREAT BRITAIN AND FRANCE, IN THE MAIN BUILDING.

Centennial Exhibition, July 13th, 1876.

Ed. Med. and Surg. Reporter:—

In the present letter I shall confine myself to the medico-chemical exhibits of Germany, Great Britain and France, in the Main building. The few chemical drugs worthy of notice in the displays of other nations will be referred to when considering the materia medica and pharmacy of foreign countries.

Germany occupies the space just south of the nave and west of the transept, and is, therefore, on the left hand of the visitor entering from Elm avenue, by the south entrance. Starting again from the vicinity of the music-stand, I traveled in a general southwesterly direction, coming at once upon the chemical exhibits, which are in the eastern portion of the German section.

Along the transept, just south of the famous "cologne" house of Johann Marie Farina, is a large case containing several exhibits.

Dr. F. Wilhelm presents oil of bitter almonds, jars of benzoic acid, and a few other chemicals.

Friedrich Jobst, of Stuttgart, has in his exhibit small but beautiful specimens of morphia, thebain and meconine, and numerous salts of quinine.

E. Scheering, of Berlin, has a truly valuable and fine-looking display, some of his preparations being unsurpassed in the Exhibition, among which might be mentioned, as especially worthy of attention, tannic, gallic, pyrogallic, and salicylic acids; sodium tungstate; chloral and croton chloral.

In another case, further westward, I came upon the exhibit of Dr. F. Von Heyden, of Dresden, which contained a number of fine specimens of salicylic acid; and also upon that of Saame & Co., of Ludwigshafen, who have a collection of pure acids and potassium salts, and splendid samples of chloral hydrate.

The German space, however, is especially rich in rare chemicals, some of which have a direct and others an indirect connection with medicine, and in illustrations of chemical technology. Colors and dye-stuffs are largely and brilliantly represented. Sodium, potassium, ammonium, and zinc salts are exhibited by a number of firms Standing by itself, on the western side of the general chemical ex-

hibits, is a striking display of alkaline salts and maps of some of the works from which they are obtained. C. A. F. Kahlbaum, of Berlin, offers for sale a "highly scientific collection" of alcohol preparations and other chemicals; H. Tromsdorff, of Erfut, has a large array of rare and beautiful chemicals, mostly not medical; and another fine exhibit, a focus of attraction for chemists, is that of Dr. T. Schuchardt, of Görlitz, Prussia. His collections of minerals and chemicals are wonderfully complete, embracing many of the rarest substances. Dr. C. L. Marquart, of Bonn, exhibits such chemicals as lithium carbonate, propylamin, chromic, butyric, and hydrofluoric acids, etc. Paraffine, perfumes, porcelain chemical ware, glass, soaps, etc., are also well exhibited.

Great Britain is found directly opposite to the German Empire and Austria, on the north side of the nave. The chemicals and pharmaceutical exhibits are well toward the northern side of the building, from E 30 to 33.

Traveling from west to east, the first medical chemicals that attracted my attention were in the exhibit of Alfred W. Gerrard, F. C. S., of London, in the centre of whose case was a beautiful mass of potassium bichromate, manufactured by John and James White, of Glasgow. I noted also, along with a few fine pharmaceutical preparations to be spoken of in another letter, specimens of chrysophanic acid, iodoform, monobromo-camphor, bromide of quinine, pilocarpine and its nitrate. This pilocarpine is the alkaloid and active principle of jaborandi, and is stated to have been discovered and prepared by A. W. Gerrard.

Above the display of Gerrard, is that of T. Morrison & Son, of London, which is exceedingly attractive, consisting of large jars of zinc valerianate, lime lacto-phosphate, quinine iodide, aloine, glacial phosphoric acid, gallic acid, creasote, pure pepsin, morphia sulphate, podophyllin, gelatine, meconine, and aconitine.

Evans, Lescher & Evans, of London, and Evans, Sons & Co., of Liverpool, wholesale druggists, include in their large and tasteful collection some fine chemical drugs. Allen & Hanbury, just eastward, have in their exhibit ammonio-citrate of iron. These firms will be noticed again in a letter on "Pharmacy."

Calvert & Co., of Bradford, Manchester, England, display carbolic and cresylic acid and derivatives. In the centre of their collection is a large mass of pure carbolic acid, surrounded by a gilt frame; and here are seen carbolic acid soap, carbolic acid sheep-wash, carbolic acid disinfecting powder, etc.; various sulphocarbolates, and carbolized tow. Picric acid, cresylic acid, and aurine are also shown in excellent specimens.

Ireland is represented by Mr. Thomas Jennings, of Cork, who has a very fair exhibit of magnesia.

F. & H. Smith & Co., manufacturing chemists of Edinburgh and London, have a splendid medico-chemical exhibit, including such substances as codeic and its sulphate, apomorphia, cryptopia muriate, caffeine, narceine, nicotin-muriate, gallic, tannic and boracic acids, iron and quinia citrate, etc.

The chemistry of the arts is well represented in the British space by such exhibits as gunpowder, colors and dyestuffs, inks, varnishes, silicate paints, and alum; but the chief chemical glory of Great Britain is its illustrations of alkali manufacture. Sodium, potassium, and ammonium salts, as used in commerce, are exhibited in large quantities and on every hand, by a dozen or more firms. The word "soda" constantly greets the eye—soda ash, soda sulphate, caustic soda, soda crystals, etc., etc. Among the establishments exhibiting, I noted Richards, Kearne & Gasquoine, of Cheshire; John Hutchinson & Co., and numerous other houses, from Widnes, Lancashire; the Liver Alkali Works Co., of Liverpool; the Newcastle Chemical Works, and the Greenbank Alkali Co., of St. Helens, Lancashire. In the display of this last company I observed some beautiful iridescent crystals of potassium chlorate. J. Corbett, M. P., of the Stoke Prior Salt Works, Worcestershire, exhibits specimens of table salt formed into massive blocks and scroll-work.

Passing now eastward into the exhibits of France, the medical, chemical, and pharmaceutical collections are found in the "forties," near the northern side of the buildings, across the hall in a straight line from some of the most important exhibits of a similar character in the United States space. Although France presents a goodly number of elegant pharmaceutical articles, she, strangely enough, has but little to offer in the strict chemico-medical line. Technical chemistry, however, is well illustrated by a number of handsome displays of colors and dyestuffs. A. Poirrier, of Paris, manufacturer of aniline dyes, has a particularly elegant exhibit, embracing large and beautiful specimens of Paris violet, saffranine, diphenylamine blue, etc., probably the most attractive of all being the chlorohydrate of rosanaline.

G. Bubaton & Co., of Marseilles, exhibit three large jars of sodium bicarbonate. Among the pharmaceutical preparations of Ch. Torchon, of Paris, chloral in various shapes is presented, a cobaye preserved by an injection of chloral being also shown. Boude & Son, of Marseilles, display sulphur in cylinders, and sublimed, and triturated.

The United States have more to offer in the way of chemical drugs than all other countries combined; but the quality of a few of the preparations of Germany and Great Britain cannot be surpassed. Germany is preëminent among foreign nations in the department of chemistry. France contributes but little, but does better in general pharmacy.

Yours, C. K. M.

—The increase in the use of hasheesh in the Ottoman Empire is so great that very stringent orders have been enacted to limit its cultivation and sale.

News and Miscellany.

The Heat.

The intense heat of the past few weeks has been entirely without parallel in this city. The thermometrical record at the Philadelphia Hospital shows a maximum temperature on five days not exceeded by any one day since 1825. From 100° to 103° have been registered on excellent instruments, well protected from the sun.

The weekly mortality has increased about 50 per cent. over the average, the deaths principally among children. Sunstroke has also been frequent. In New York city the mortality for the week ending July 15th was much more formidable than any before reported. The returns from all the cemeteries, up to noon, foot up 1298, against 858 the week preceding. The increase was at a rapid ratio for a succession of six weeks, as thus:—Week ending June 10th, 460; 17th, 459; 24th, 443; July 1st, 636; 8th, 838; 15th, 1298. Of the latter, it is safe to say that at least 450 were the results of the excessive heat.

Principals of Deaf-Mute Institutions.

The Third Quadrennial Conference of the Principals of Institutions for Deaf Mutes in the United States and Canada met July 12–15, in the Pennsylvania Institution, Broad and Pine streets. The President, Rev. Thomas MacIntire, was in the chair. The attendance was full, and much of special interest was submitted.

Dr. Gallaudet, of Washington, from the Committee on Business, reported resolutions, which, when amended, were as follows:—

Resolved, That in the education of the deaf and dumb the place of prominence and honor should be accorded to the intellectual and moral training of the pupil, followed by thorough and well-provided instruction in industrial labor.

Resolved, That deaf and dumb pupils require, for their proper intellectual development while in school, the equivalent of five hours of daily instruction, for five days of the week, during nine months in the year, for seven years, under the direction of well-educated, vigorous instructors.

Resolved, That instructors of the deaf and dumb ought not, as a rule, to be required or permitted to spend more than five hours a day in the work of the class-room; but they should be expected to divide the remainder of their time between study, recreation and exercise, in such manner as would prepare them to sustain the strain upon their intellectual and nervous forces, which is inevitable in a proper discharge of their duties as teachers.

Emotional Insanity.

A trial for murder, at Rock Island, Illinois, has lately been concluded, which is interesting, because it raised the direct question of "emotional insanity" on the part of the murderer, without complication with other pleas in defence. Brita Nelson, a Swede, and the wife of a miner named Peter Nelson, killed her husband by beating him on the head with an axe and cutting his throat. According to her own story, a man named Peter Wickland, who boarded with her, and had won her affections, advised her to commit the murder. She made no effort to conceal the crime, and expressed no emotion at any time after her arrest. The only plea in defence was that the prisoner had committed the murder in a fit of "emotional insanity," and as to this the testimony of experts was taken. The jury, after twenty-two hours of deliberation, found a verdict of not guilty, on the ground of insanity. While the jury was deliberating, the prisoner was delivered of a child, but this fact was unknown to the jurors at the time. There was no evidence that Mrs. Nelson had ever before shown symptoms of insanity, and the most that was said of her, by physicians who examined her afterward, was that she was "dull," and seemed to be mentally weak. The chief evidence of her insanity was her brutality and insensibility to the atrocity of her offence, and the fact that she exhibited no remorse and no fear of punishment.

Personal.

—At Corsicana, Missouri, Dr. Halliday, while walking home with his wife and another lady, was shot dead by a ruffian named Crawford. It is supposed Crawford was hired to commit the murder.

—Foreign advices record the sudden death of the eminent German military surgeon, Dr. Stromeyer. On the morning of June 15th he rose in his usual health, and at ten was dead, from apoplexy, after a few minutes' illness. He died in harness, being actively occupied in his profession till the last. Two years since, Stromeyer published, under the title of "Recollections of a German Surgeon," his autobiography. It created much interest in Germany. This book is full of interesting details on places and men, the Danish wars, the overthrow of the King of Hanover, the last great war, etc. Besides the details given concerning the teachers under whom Stromeyer himself studied in various German universities and in London, his own experiences as a professor are vividly set forth. Only in April last Stromeyer had all possible honors heaped upon him at a semi-centennial celebration of his doctorate.

—The death is reported of Dr. Pétrequin, Professor of Surgery at the Lyons, France, School of Medicine. Prof. Pétrequin was not only conspicuous by brilliant qualities as a surgeon and a teacher, but was noted for his vast erudition and the manner in which he brought before his professional brethren some of the medical works of the ancients. He paid particular attention to the surgical works of Hippocrates, which he translated and enriched with copious notes.